## **REMARKS**

With respect to the Examiner's requirement for election of invention being made final, the Applicant hereby elects invention I (Claims 1-8).

With respect to the Examiner's rejection of Claims 1-8 under 35 USC § 103, as being unpatentable over Hibi (US 5,612,077) in view of Sumi *et al.* (US 4,649,052), Kodera (US 5,093,122), and further in view of Komimato *et al.* (US 3,626,300), the Applicant respectfully traverses.

Applicant respectfully submits that the cited prior art references cannot be combined to produce the claimed invention. In summary, the claimed invention comprises a method of enriching anti-oxidant content of an onion or garlic plant, by first macerating, drying and grinding the plant tissue, and then extracting the anti-oxidant with ethanol. Enrichment of anti-oxidants appears to take place upon maceration. The closest prior art deemed relevant by the Examiner is the Hibi reference.

Hibi discloses a method of producing ajeone-containing edible oil product. In this case, garlic is mashed and the garlic juice is incubated with an edible oil. The Z-ajoene forms in the oil. Of note is the fact that the Z-ajoene is not extracted from garlic juice, or from the edible oil, with alcohol or any other solvent. As noted by Examiner, the use of ethanol is mentioned in the "Third Reference Example", column 7. However, Hibi specifically teaches away from the use of ethanol, stating: "As shown in the table [Table 3], a larger amount of ajoene is obtained as compared with when organic solvents are used. In other words, ethanol impairs the formation of the desired compound, ajoene. Furthermore, in Hibi, ethanol is not used to extract the desired compound, it is simply mixed with the garlic juice.

The Sumi reference discloses a method of producing garlic paste, addressed more specifically to an odorless garlic paste; and not to a method of producing antioxidant composition. Specifically, there is no step of extracting anti-oxidants from the macerated plant tissue, as there is in the present invention. Additionally, Sumi requires a heating step to greater than 99° C to inactivate certain enzymes. In the present invention, the macerated plant tissue is incubated at a temperature less than about 30° C.

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Kodera also differs from the claimed invention in that Kodera does not disclose a method of

enhancing and extracting anti-oxidants from plant tissue. In particular, there is no incubation step

disclosed in Kodera, as there is in the claimed invention. Where ethanol is used, it is added to whole

garlic cloves and homogenized immediately. In the present invention, the incubation period is

required to allow time for enrichment of anti-oxidant. After enrichment, ethanol is used to extract

the anti-oxidant.

Thus, the combination of Kodera, Sumi and Hibi fails to teach all the elements of the claimed

invention. Applicant respectfully submits that the claimed invention under consideration is not

prima facie obvious in light of the cited prior-art.

**CONCLUSION** 

In view of the foregoing remarks, it is respectfully submitted that this application is in

condition for allowance and allowance thereof is respectfully requested.

Respectfully submitted,

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